

Extend the range of your wireless station—for miles on end!

For longer distances or to improve reception in troublesome areas, add 1 or more wireless repeaters. Use repeaters in a daisy chain, retransmitting from a single Vantage Pro2 or Vantage Vue Integrated Sensor Suite, or special-purpose station. You can also build a network of repeaters and wireless stations, with some repeaters listening to multiple stations, each with their own unique ID. For use with any Davis wireless transmitter and receiver.

Long-Range Wireless Repeaters

In our testing, we achieved an incredible 4 miles (6.4 km) of transmission distance using 2 of our long-range repeaters with Yagi antennas. Range varies depending on antenna height, the terrain and foliage, buildings, other man-made structures, and RF interference. Ideal for agricultural or research applications where long distances are an issue. This solar-powered model includes solar panel and lithium backup battery. Antennas are sold separately.

7654 Long-Range Repeater, Solar-Powered



REPEATER DISTANCES				
Antenna Combination	Multiplier	Maximum Transmission Distance under optimal conditions **		
Dipole – Dipole *	1.00	1000'	0.2 mile	300 m
Dipole – Omni	1.58	1580'	0.3 mile	475 m
Dipole – Yagi	3.16	3160'	0.6 mile	950 m
Omni – Omni	2.50	2500'	0.5 mile	750 m
Omni – Yagi	5.00	5000'	1.0 mile	1500 m
Yagi – Yagi	10.00	10,000'	1.9 miles	3000 m

* Dipole antennas are found on all Davis wireless weather stations and standard repeaters.

** Typical distance will be less. Outdoors, line of sight with minor obstructions or interference, typical distance is about 50–80% of the maximum. Through walls or in areas with high RF interference, typical distance may be as low as 20–40% of the maximum.



Long-range repeater with 1 Yagi and 1 Omni antenna.



Antennas for Long-Range Repeaters

For use with our long-range repeaters. Each repeater requires 2 antennas: 1 to receive data, and another to retransmit it. Omni antennas transmit or receive in all directions. Yagi antennas transmit or receive from a single direction, but have a longer transmission distance. Mix and match to suit your needs using the table above.

7656 Omni Antenna

7660 Yagi Antenna

Note: FCC regulations require that US customers select from the antennas above; customers outside the US must purchase third-party antennas in compliance with local regulations.



Standard Wireless Repeaters

Ideal for most applications, uses the same dipole antenna found on all of our wireless stations. Range is up to 1,000 ft. (300 m) outdoors, line of sight. Typical range through walls is 200 ft. to 400 ft. (60 to 120 m). AC-powered model includes power adapter. Solar-powered model includes solar panel and lithium backup battery.

7626 Standard Wireless Repeater, AC-Powered

7627 Standard Wireless Repeater, Solar-Powered

